

**REMARKS**

Claims 1, 5-8, 10-11, 13, 15, 17-20, 22-24 and 41-51 are currently pending in this application. No new matter has been added. Claims 1, 13, 20, 42, and 49 are independent. Reconsideration and allowance of the subject application is respectfully requested.

**Rejections under 35 U.S.C. 102(b) and 103(a)**

Claims 1, 5, 6, 13, 20, 42 and 50-51 are rejected under 35 U.S.C. 102(b) as anticipated by Sako (WO 02/37493). Also, claims 8, 10, 15, 17, 19, 22, 43 and 47-48 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to the claims as stated above, and further in view of Ha (USP 7,028,011). Applicants respectfully traverse these rejections.

Applicants note a typographical error in the rejection in that claim 50 depends on claim 49, which is not rejected.

Applicants have amended independent claims 1, 13, 20 and 42 to include limitations from claims 8, 15, 22, and 43, respectively. For example, claim 1 recites "disc identification information identifying a type of the computer readable medium and recorded in an area preceding the lead-in area." The Examiner recognizes that Sako fails to disclose or suggest these limitations. However, the Examiner contends that Ha teaches the claimed disc identification information and that one skilled in the art would have combined the teachings of Ha with Sako. Applicants respectfully disagree.

Ha discloses that a disc 10 may include a ROM area 30 and a recordable area 50. Ha further discloses that the ROM area 30 includes a lead-in area 32, a program

area 34 and a lead-out area 38. Still further, Ha discloses a disc identifier sub-code track 33 that may precede the lead-in area 32 of the ROM area 30. (See Figs. 1 and 2, and col. 4 of Ha). The Examiner contends this teaches the claimed disc identification information.

Immediately, at least one distinction between these teachings of Ha and the claimed invention becomes abundantly clear. Ha teaches something called a “disc identifier sub-code track 33” prior to the lead-in area 32 of a ROM area 30, not a lead-in area of the recording medium as required by claim 1.

Then, upon further investigation, Ha teaches that the disc identifier data in the sub-code track 33 will be the same for all discs manufactured in a specific lot or run of a manufacturing cycle, and that this data will be used for authentication/copy protection. (See column 5 of Ha).

Accordingly, there is no teaching in Ha of “disc identification information identifying a **type** of the computer readable medium,” as required by claim 1.

In view of the above, even assuming Ha was combined with Sako, the resulting combination fails to render claim 1 obvious to one skilled in the art.

Still further, Applicants reiterate their arguments that Sako does not teach “a modulated unique pattern for the physical mark information having at least a part of the wobbled pits being shifted from a central line of the wobbled pits,” as recited in claim 1. The Examiner contends that this language permits overlap of the pits with the central line as shown in Fig. 11D of Sako, but Applicants specifically commented that this is not the proper interpretation of the claim, and request that the Examiner honor Applicant's intended meaning as set forth in the record.

Claims 13, 20 and 42 include similar limitations to those discussed above with respect to claim 1, and are patentable at least for the reasons stated above with respect to claim 1.

Claims 5 and 6 are patentable at least for depending on claim 1.

Applicants respectfully request that the Examiner withdraw this rejection.

Claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to the claims as stated above, and further in view of Kuroda ('844). And, claims 11, 18, 23, 24, 44, 45 and 46 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims as stated above, and further in view of Official Notice.

Applicants respectfully traverse these 103 rejections. Applicants submit that these rejected dependent claims are allowable at least for depending from allowable base claims. In addition, Applicants submit that none of the cited references cure the deficiencies identified above with reference to Sako in view of Ha.

Claim 49 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Sako in view of Horimai (USP 5,563,872). Applicants respectfully traverse this rejection.

Claim 49 recites "forming disc identification information identifying a type of the recording medium in an area preceding the lead-in area." As discussed above, Sako and Sako in view of Ha fail to disclose or suggest this limitation. Horimai does not overcome these disclosure and suggestion deficiencies of Sako and Ha. Therefore, Sako in view of Horimai, and Sako in view of Ha and Horimai, can not render claim 49 obvious to one skilled in the art.

Furthermore, claim 49 recites "the physical mark information provides control information for controlling a reproduction of data recorded as straight pits on a data area of the recording medium and is formed along a modulated unique pattern, wherein if the pit type selected is wobbled pits, at least a part of the wobbled pits

forming the physical mark information wobble in a non-overlapping manner with respect to a central line of the wobbled pits, and wherein the modulated unique pattern represents encryption information used in encrypting data of the data area."

The Examiner recognizes that Sako discloses wobbling pits such that the pits still overlap the central line of the pits as shown in Fig. 11D, and does not disclose or suggest "the physical mark information wobble in a non-overlapping manner with respect to a central line of the wobbled pits." However, the Examiner contends that Horimai teaches this limitation and that one skilled in the art would have combined the teachings of Horimai with Sako. Applicants respectfully disagree.

Horimai teaches recording a string of pits on one side of track, and recording the logical inverse on the other side of the track. Horimai applies this teaching regardless of the information or area of the track.

Sako, however, teaches in col. 18, line 46 to col. 19, line 7:

On the other hand, with the wobble technique, the pits P are formed in positions off the track center Tc in a direction perpendicular to the track direction, that is, in the widthwise direction of the track as shown in FIG. 11D. In the example shown in FIG. 11D, when the additional data is "1", the pits P are formed in positions deflected to the left of the track center Tc in the direction perpendicular to the track direction. When the additional data is "0", the pits P are formed in positions deflected to the right of the track center Tc in the direction perpendicular to the track direction.

At this time, the amount or distance over which the positions of the pits P are deflected **should be within the allowable range defined in the CD standards** as a deflection of pit forming position during recording of audio data, such that the distance between the widthwise center Pc of the pit (indicated with the dashed line in FIG. 11D) and track center Tc is 50 nm for example.

The track-widthwise deflection of the position of the pit P is detected as a tracking error which is an output of the photodetector in the so-called push-pull system. So, by binarizing the tracking error, the additional data can be reproduced. However, when data is recorded to a recordable CD such as CD-R, CDx-R, CD-RW or CDx-RW, pits can only be formed as shown in FIG. 11C, that is, they cannot be wobbled. Namely, even when data is illegally copied, information as to the encrypt key for decryption of encrypted data cannot be reproduced so that the copyright of the data can appropriately be protected.

(emphasis added)

As is readily apparent from this discussion in Sako, Sako explicitly teaches away from wobbling pits "in a non-overlapping manner with respect to a central line of the wobbled pits," as recited in claim 49. It is a well-known tenet of U.S. Patent Law that where one reference teaches away from the asserted combination, such a combination would NOT have been obvious to one skilled in the art.

Still further, such a combination would destroy the purpose and intent behind the wobbling in Sako, which is also a well-known impermissible combination.

Accordingly, one skilled in the art would not have combined the teachings of Horimai with Sako. For these additional reasons, Sako in view of Horimai, and Sako in view of Ha and Horimai, can not render claim 49 obvious to one skilled in the art.

Applicants respectfully request that the Examiner withdraw this art grounds of rejection.

**CONCLUSION**

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application; the Examiner is respectfully requested to contact Gary D. Yacura, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

  
\_\_\_\_\_  
Gary D. Yacura, Reg. No. 35,416

P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

GDY/ame